

## ABSTRACT

5           A cortical bone implant is formed of two or more planks of bone which are  
connected with one or more offset pins. The pins may be right circular cylinders  
inserted into a corresponding offset bore which offset bends the inserted pin. The  
bending creates compression and tensile loads in the pin which loads creates  
friction compression forces on the planks connecting them to the pins by friction.  
10   The pins may have different shapes to form the offsets and different configurations  
for friction attachment to the planks. The implants may be formed of flat or L-  
shaped planks or bones formed into other shapes including interlocking  
arrangements. Processes and fixtures are disclosed for forming the pins, planks  
and implants. Various embodiments of the pins, planks, implants and processes  
15   are disclosed.